



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,443	02/18/2000	Tetsuji Kawazura	P21-9056	8222

7590

02/25/2002

ARENT FOX KINTNER PLOTKIN & KAHN
1050 Connecticut Avenue, N.W. Suite 400
Washington, DC 20036-5339

EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1711

11

DATE MAILED: 02/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/506,443

Applicant(s)

KAWAZURA ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1711

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 22 January 2002. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 1-17.Claim(s) objected to: none.Claim(s) rejected: 1-17.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Jeffrey C. Mullis
J Mullis
Art Unit: 1711

Art Unit 1711

ATTACHMENT TO ADVISORY ACTION

Applicants' after final amendment has not been entered since it has not been submitted with a complete marked up copy in that the material after page 11 of applicants' response appears to be missing along with the last portion of claim 1 being amended.

Much of applicants' remarks appear to pertain to their characteristic reciting "Mw30(a)". However since applicants' after final amendment has not been entered, applicants' characteristic still renders the claims unclear.

Applicants allege a number of unexpected results with regard to their invention. However it is yet to be proved that applicants' composition is different from that of the prior art and unexpected results are immaterial to anticipation. For the reasons set out above, it is still the position of the Examiner that applicants' characteristics are inherent in the art relied upon. Applicants argue that Kawauzra does not disclose the reactivity or reacting ratio of a coupling reaction. However coupling efficiency of Kawauzra is immaterial to any limitation in the claims. The amount of coupling will affect the ratio of diblock to triblock copolymer but will not affect the molecular weight distribution unless a molecular weight distribution is being calculated for the combination of diblock and triblock copolymer.

Art Unit 1711

With regard to Zanzig, the Examiner has reviewed the Table presented on page 8 of applicants' remarks. Applicants argue that the weight average molecular weight of each block BR is too low in the block copolymers 1-3 and the molecular weight of each block IR is too low in the block copolymer 4. However with regard to the limitations of the instant claims, the weight average molecular weight of the blocks IR and BR would only be too low if Mw30 were too high. If the weight average molecular weight were equal to the MW30, then of course the weight average molecular weights of blocks IR and BR would be too low. However if the Mw30 of the NR and BR were lower by a factor of 2 or 3 than the weight average molecular weight of NR and BR, then the weight average molecular weights of the blocks would not be too low. Note Figure 2 in applicants' specification which appears to show that Mw50 is higher by a factor of about 3 or even more than Mw30 by reference to the logarithmic scale although admittedly reference to applicants' Figure 2 is inexact. Applicants argue that the microstructure of the BR block portion would not be compatible with the matrix polymer due to difference in microstructure. However the title of the article by Zanzig refers to compatibilizers and it would therefore appear that Zanzig is compatibilizing incompatible materials.

With regard to applicants' characteristic reciting Mw30, it is noted that no such characteristic appears in claim 14.

Art Unit 1711

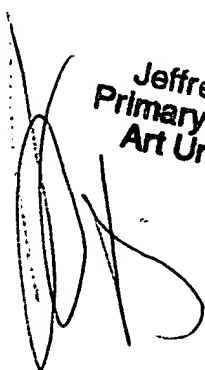
Applicants argue that it is well known in the art that the homopolymer in a large amount corresponding to 5 parts by weight bonded upon 100 parts by weight of the block copolymer is not formed in a conventional alkyl lithium polymerization. However instant claim 14 does not require the presence of a homopolymer and in any case the level of "5 to 200" parts of polymer appears to apply only to the polymer alpha which appears to be optional in claim 14 in that claim 14 recites "and/or a mixture of the polymer alpha and the polymer beta".

With regard to applicants' request for an interview, these are not normally granted after final Office action except for purpose of correcting minor outstanding matters but in any case there was insufficient time to contact applicants for an interview.

J. Mullis:cdc

(703) 308-2820

February 20, 2002


Jeffrey Mullis
Primary Examiner
Art Unit 1711